

In.
Inaugural Dissertation
for
The degree of M.D.
Submitted to the examination
of the
Medical Faculty
of the
University of Pennsylvania
by
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A dissertation on the Medici-
-nal effects of Cold Applications.

Originating perhaps in the infancy of
Medical science, the Application of Cold water
has continued to the present time, and still
we find physicians unacquainted with its
powers in the cure of the diseases of the human
family - believing therefore that more good
is to be done by correctly stating the diseases
to which it is applicable. Modes of applica-
-tion &c. then by a history of its use and
progress, and as the time allotted to me would

not permit my indulging in inquiries of
this nature however desirable they might
be, I shall confine myself exclusively to a
statement of its use as found by experience
in the cure of diseases -

Several modes of applying cold water have

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been resorted to viz by dashing it over the body
from buckets, by means of the shower bath,
or by sponging the body with a wet sponge,

All these different forms have their advo-
cates, but from what I have myself seen,
and from the testimony of our highly respec-
ted and worthy professors of the practice
of physic, I am inclined to believe, that the
latter mode is the safest and should be gen-
erally preferred.

I shall commence with its
use in fever, and first in Intermittent
fever, to intermittent fever it has been ap-
plied but I believe not very frequently - the
following circumstance drew my attention
to its use in the cure of this disease, whilst a
company of us was a fishing last autumn in
a small canoe I was attacked with a severe
chill which continued about forty minutes

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And was followed with a very hot and dry
skin, pain in the head, with a quick, full and
hard pulse. While I was in this situation I
made an attempt to jump on shore but accid-
-entally fell into the water, After some exerti-
-on I gained the shore, changed my clothes and
had the satisfaction to find that the sweating
stage was much sooner induced than it had
been the preceding paroxysm, and without a
repetition I was completely cured.

I have since, by the consent of the attending
physicians of our Almshouse, tried the effects
of effusion with cold water, in several obstin-
-ate cases of intermittents. After having cleansed the
stomach with an emetic, and in every case atten-
-ded with high arterial action, it was follow-
-ed with the happiest effect, by abstracting hu-
-at from the surface it removes the blood from
the overloaded capillaries and enables them to

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relieve themselves by a copious perspiration.

O To remittent fever which is only to be distinguished from intermittent, by the shortness of the *lappesia* it is equally applicable. It appears to me that the proper time to apply cold water in this disease, would be after purging, bloodletting, emetics, and cathartics, and to be followed by a mild diaphoretic, as the aspersions generally dispose to a moisture on the skin, diminishing heat and consisty, rendering the countenance cheeful, the pulse more natural, disposing to sleep, and sometimes cuts short the disease.

In the course of this fever the heat of the surface is sometimes so great as to require immediate relief, in this case I am not acquainted with any remedy, which acts so promptly as cold water applied to the surface - and where there is great determination to

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the head, which is denoted by a suffusion of countenance, a wild expression of the eye and sometimes delirium, cold water will be found an excellent auxiliary to cups and leeches.

To the early stage of our bilious inflammatory fever, our remedy is well suited, this disease is generally attended with great action of the pulse and great heat of the body, the application of cold water in such cases is eminently beneficial, it subdues the activity of the bloodvessels, causes diaphoresis, and quiets the irritability and restlessness of the patient, but if it is deferred until the system is reduced by our remedies or by disease - where there is a feeble pulse and symptoms of great debility, our remedy, so far from being useful, will be absolutely pernicious. the syst.

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To typhus fever our remedy seems to have been applied with the greatest advantage. After resorting to emetics to break the force of the disease, to relieve the pain in the head and lessen the irritating heat of the surface, it is well suited, and scarcely any thing so well relieves the patient from the great anxiety and restlessness which always attends this disease. After the depression which follows the exacerbation in this disease has taken place, the application of cold water might be attended with great mischief, as the system at this period is unable to react, and death would probably ensue, under such circumstances I presume our remedy would not be app-

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employed, after fortifying the ^{system} stomach with
opium, brandy, or some other stimulant, It
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slightest perspiration

^{Heat}
No yellow ^{fever} which has occasioned so much con-
troversy among physicians, and such destruc-
tion to the inhabitants of our cities, our rem-
edy has been applied, this disease has by
frequent dissection been found to exert its
greatest force on the stomach, inflammation
in all its various grades, have been found
in this organ, and as there is no remedy
more effectual in relieving or bringing
~~about~~ resolution, in inflammation
generally, than cold applied to the infl-
amed part, as we see in swelled testes, ve-
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of cold water have the same effect upon
 the inflamed surface of the stomach. Dr
 Thomas tells us that cold water taken in-
 ternally as drink in small quantities fre-
 quently repeated, has been observed to
 moderate the excessive heat of the body, as
 well as the violence of general febrile act-
 ion and thirst, it is likewise efficacious
 he says, in disposing the skin to perspire
 gently, and in preventing inflammation
 and irritation of the stomach. Dr Rush
 whose name stands ranked amongst the hi-
 ghest of the profession, also informs us, that
 the internal and external use of cold water
 was a most agreeable and powerful rem-
 edy in this disorder, he directed it to be ap-
 plied by means of napkins to the head, and
 to be injected into the bowels by way of gly-
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face and hands and sometimes the feet with cold water and always, he says with advantage, when applied in this way it gradually abstracts the heat from the body, and thereby lessens the action of the system, cold water when applied to the feet as certainly reduces the pulse in force and frequency, as warm water applied in the same way produces contrary effects upon it. — In the hydrocephalic state of fever, cloths wetted with cold water or vinegar, or ice applied to the head, contribute very much to relieve the pain in the head — in this case cold acts by carrying off the heat from, and lessening the determination to the part affected.

In inflammation the application of cold, ^{is} indeed one of the most powerful means which we possess for abstracting heat and subduing the disease, and it has been carried so

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for in some instances that pounded ice and snow have been employed for this purpose.

In phrenitis after the use of bloodletting both general and local, topical cold over the region of the brain by a wet towel, or frequently immersing the head in a bucket of cold water, will indeed in many cases prove more efficacious than the application of a blister, as this has been observed occasionally not only to accelerate the pulse, but likewise render the patient more unmanageable, but the application of a blister will not preclude us from the use of cold applications, as linen cloths wetted with water, may likewise be kept constantly to the temples and forehead and renewed as often as they acquire the temperature of the part by continuance. In ophthalmia the application of cold water or milk and water is in many cases eminently beneficial, and may be applied to the

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eye, by means of an eye cup, or when this cannot be obtained by wet pledgets, or when we have reason to believe the complaint is kept up by some irritating particles in the eye, by frequently injecting cold water into the eye, by means of a small syringe - in all superficial inflammation the use of cold application will be found of service, as I have ~~found~~ seen in cases of fractures, bruises and other accidents, speedily reducing the swelling and enabling the parts to regain their former tone -

In scarlatina I have not had an opportunity of seeing our remedy tried, but from the testimony of Dr. Currie, I am inclined to believe that it is truly a valuable remedy. Dr. Currie mentions in his medical reports that he found the affusion of cold water to extinguish incipient scarlatina in repeated instances, so as to prevent either efflorescence

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or any affection in the throat from taking place he says the plan he follows, if called in at this early period, when the patient feels steadily hot and the shiverings having gone off, is to strip the patient quite naked and dash for a few gallons of the coldest water over his naked body, the heat returning it is sometimes necessary to use it ten or twelve times in twenty four hours, during this time he says, cold water and lemonade should be used as drinks, and the bowels opened if necessary, by the sublimiate of mercury, in a few instances he has thought it advisable to assist the affusion, by the diaphoretic power of a solution of tartarised antimony, he adds that in upwards of one hundred and fifty cases he uniformly followed the practice here detailed and with a degree of success so nearly invariable that he could not contemplate it without emotion

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In haemorrhage cold water is of acknowledged efficacy - in epistaxis, cold applications is one of the remedies ^{is} universally resorted to, it may be applied by dipping the head in water made cold by the mixture of ammonia, or some other salt, by immersing the scrotum in cold water, or applying cloths wetted with the same to the labia pudenda of the female, by injecting cold water up the nostril, or by keeping it constantly applied by means of a sheep gut, which being tied at one end by means of a thread, and inserted up the bleeding nostril and filled with cold water, which I suspect will seldom fail of stopping the discharge - cold water has been occasionally used in haemorrhage from the lungs, but I believe the remedy would be hazardous and would hardly fail of aggravating the disease, its action is undoubtedly

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to produce a momentary constriction of the uterine vessels and consequently, must determine the blood to the internal parts, cold drinks are much more appropriate and are in all cases proper. In uterine hemorrhage it is peculiarly suited, applied to the vulva or over the region of the uterus, or thrown up the vagina by means of a syringe will be found highly useful. in profuse flooding cold water or even ice introduced into the uterus will prove very beneficial.

In cases of obstinate constipation which so frequently attends colic, our remedy is not to be neglected. it may be employed by dashing it over the patient, or by way of mechanical dilatation viz by injecting a large quantity of it by a proper syringe, which will throw it into the rectum in a continued stream and with some force, the patient drinking

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copiously at the same time, some persons have
borne two gallons to be injected in this way
before they were relieved. — As an Antispasmodic
in Colica pictonum, cold water dashed on the ext^r
-mities has been spoken of in high terms, it is
said the benefit obtained by dashing cold
water on the extremities in this disease seems to
be owing to the sympathy which exists between
them and the intestines, the fibres of the latter
become relaxed, while the sudden contraction
of the vessels on the skin, in consequence of
the application of cold, determines the flow
of blood internally and occasions a copious
secretion from the intestinal surface, wh-
-only a free expulsion quickly ensues. — Our
remedy will also be found to assist the ope-
-ration of tonics in many cases of debility and
as such to the physician it is truly a val-
-uable remedy and should never be lost

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apply it only to persons whose systems are
not so far debilitated as to be incapable of
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case, if the patient feels a pleasant glow
over his body and is cheerful after com-
ing out of the bath, but if shivering, con-
on, or sinking of the pulse, or the patient
feels drowsy, the remedy should not be repe-
ated - In closing this imperfect essay,
I cannot but acknowledge my obligations
to the learned professors in the different
departments of this university, whose ch-
aracters both as men and physicians, entitle
them to the highest respect, and whom far from
I hope I shall justly appreciate, whilst
gratitude remains to be a virtue -











